

EXPRESS MAIL CERTIFICATE

DATE

2/28/02

LABEL NO.

EV029139420US

I HEREBY CERTIFY THAT, ON THE DATE INDICATED ABOVE
THIS PAPER OR FEE WAS DEPOSITED WITH THE U.S. POSTAL SERVICE
& THAT IT WAS ADDRESSED FOR DELIVERY TO THE ASSISTANT COMMISSIONER
OF PATENTS & TRADEMARKS, WASHINGTON, DC 20231 BY "EXPRESS
MAIL POST OFFICE TO ADDRESSEE" SERVICE.

NAME (PRINT)

SIGNATURE

PLEASE CHARGE ANY DEFICIENCY UP TO \$300.00 OR
CREDIT ANY EXCESS IN THE FEES DUE WITH THIS
DOCUMENT TO OUR DEPOSIT ACCOUNT NO. 04-0100

Customer No.:



Docket No.: 0885/0D930

RECEIVED
MAR 11 2002
TC 1700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Deborah Ann LEWIS ET AL.

Serial No: 9/155,740

Group Art Unit: 1761

Filed: February 27, 1998

Examiner: H. Pratt

For: FRUIT PRODUCTS

DECLARATION OF DAVID S. REID UNDER 37 C.F.R. §1.132

Hon. Commissioner of
Patents and Trademarks

Washington, DC 20231

Sir:

I, David S. Reid of 1 Shields Avenue, Davis, California 95616-8571, United States
of America, declare:

1. I am a Professor in the Department of Food Science and Technology, University of California, Davis, United States of America.

2. I have been teaching scientists and engineers for 20 years, and I believe that I am quite familiar with the level of skill of students at the undergraduate and graduate level.

3. I have reviewed the specification of United States Patent Application No. 09/155,740. I have reviewed the final office action of Examiner H. Pratt dated November 20, 2000. I have further reviewed the prior art references relied on by the examiner in the final office action, these being Steinwand (USP 2,326,407), Reznik (USP 3,741,106), Unilever British Patents Nos. GB 1004522 and GB 1228175, and Hsieh (USP 4,917,910). I believe that the level of skill of a person of ordinary skill in the field of the subject matter of the patent application is that of an ordinary scientist or engineer with a bachelor's degree in food science or technology.

4. I have been asked for my expert opinion regarding the knowledge of a person of ordinary skill in the field of the invention of US Patent Application No. 09/155,740 (hereafter the "Byron application"), to comment on the prior art references relied on by the examiner in the final rejection dated November 20, 2000 from the point of view of such a person, and to comment briefly on the Examiner's objections and rejections from the point of view of such a person.

4. A person of ordinary skill in the field would realize that the Steinwand patent describes a process in which the skin of a pretreated berry fruit is ruptured to allow the ingress of sugar solution without consequential osmotic shrinkage or cracking. The pretreatment of the skin is with hydroxide, which modifies the cell wall polymers of the skin. The result is a product of lowered a_w , which retains natural size. The person of ordinary skill would understand that this is not equivalent to a dried fruit of similar a_w , since there are characteristic changes in the chemistry of fruits consequent upon drying which do not occur in fresh fruits. An example is the difference between a plum and a dried prune, or a grape and a raisin.

5. A person of ordinary skill would realize that the Reznik patent describes a process, in which naturally dried dates are cracked by passage through rollers, then exposed to a vacuum to remove air prior to adding water. This pretreatment enables rapid ingress of water, and therefore rapid rehydration. The person of ordinary skill would understand that this process is one for rapid rehydration of dried fruit, and results in an increase in a_w .

6. To the person of ordinary skill, the Hsieh patent describes the absorption of glycerol into dried fruit. The described process, which can be multistage, would be understood to be slow. The resulting product is more moist and succulent than the original dried fruit.

7. To those of ordinary skill in the art, the Unilever patents describe a dehydration process, which aims to increase the rate of rehydration. They would understand that the purpose of the skin rupture is to enhance moisture removal and that the purpose of the added humectant is to enhance the rate of rehydration. They would appreciate that the patent is not concerned with the properties of the dried product, only with the rapidity of drying, the rapidity of rehydration, the production of acceptable consumer properties for the rehydrated product.

8. Those of ordinary skill in the art would conclude that the Steinwand patent, concerned with the maintenance of some fresh-like character in preserved fruits, is in a field different from the Byron claim, to wit it deals with fresh fruits, rather than dried fruits, products with markedly different characteristics. Similarly, the Unilever patents would be understood to be concerned with a process to retain fresh-like character in a product, in this case a dried and rehydrated product. Also, it would be appreciated that the character of vegetables, particularly pulses, is different from most fruits. Those of ordinary skill in the art would understand that the dried vegetable products described in the Unilever patents are expected to be put through a cooking process prior to consumption.

9. To one of ordinary skill in the art, the Reznik patent describes the processing of a dried fruit by introducing cracks on the surface, but it would be understood that the purpose is to enhance rehydration, and provide improved eating quality by such increased moisture content. Reznik does not claim to enhance eating quality under low moisture conditions. In this way the product would be understood to be different from that of the Byron claim which is intended for consumption under low-moisture conditions. The final product of the Reznik patent does not have long term stability. That characteristic is possessed by the original date. As those of ordinary skill in the art would understand, the Reznik process is intended to render the stored date more suitable for consumption, not to produce a stable final product.

10. The product of the Hsieh process would be understood by those of ordinary skill in the art to be similar to that of the Byron claim, in that it is a moist, succulent dried fruit of lowered a_w , containing added humectant which provide moistness and tenderness without increasing the a_w to a level where microbiological stability is compromised. The Byron claim would be understood to differ, in that it describes a process in which the rate of incorporation of the humectant is greatly enhanced.

11. While combining parts of the claims within the other patents can duplicate the methods of increasing the rate of incorporation of the humectant, the purpose of these partial processes within the other patents would be understood by those of ordinary skill in the art to differ significantly from the purpose in the Byron claims. I do not believe that a person of ordinary skill in the field would find the claims of the Byron process obvious from reading the teachings of the Steinwand, Reznik and Unilever patents. The Hsieh patent describes a time-consuming process. The teachings of the Byron claim, which result in a rapid process, would be considered unobvious by one of ordinary skill in the field. The other cited patents are such that one of ordinary skill in the

field would think of consulting them in order to develop a process to rapidly incorporate humectant into fruits to produce a stable, moist product as claimed in the Byron application.

The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further, that the statements are made with the knowledge that willful false statements and the like so made are punishable by fine or punishment, or both, under Section 1001 of Title 18 of the United States Code.

Date: July 26 2001

David S. Reid
David S. Reid